## LXIV.—Diagnoses of new Fishes from the Upper Zambesi. By G. A. Boulenger, F.R.S.

In the September number of these 'Annals' I had the privilege of giving diagnoses of 12 new fishes from Lake Nyassa. A further advance has since been made in our knowledge of the fishes of the Zumbesi System through the exertion of Mr. T. Codrington, who on a recent visit to his son, Mr. R. Codrington, Administrator of N.W. Rhodesia, availed himself of the exceptional facilities afforded him to make a very valuable collection of the fishes, which he has presented to the British Museum. Seven species are considered to be new and are here briefly characterized. Further descriptions and figures of these will appear in the British Museum 'Catalogue of African Freshwater Fishes,' now in course of preparation.

#### Barbus victoriae.

## D. IV 8. A. III 5. L. lat. 30. L. tr. $\frac{5\frac{1}{2}}{5\frac{7}{6}}$ .

Depth of body 3 times in total length, length of head  $4\frac{1}{2}$  times. Shout rounded, 3 times in length of head, eye 5 times, interorbital width  $2\frac{1}{3}$  times; mouth inferior, its width 3 times in length of head; lower jaw with a nearly straight sharp edge, covered with a thin horny sheath; lips rather thick, papillose, lower restricted to the sides; barbels 2 on each side, anterior  $\frac{1}{3}$ , posterior  $\frac{1}{2}$  diameter of eye. Last simple ray of dorsal not enlarged, flexible, smooth,  $1\frac{1}{3}$  length of head; border of dorsal concave. Anal nearly reaching caudal. Base of ventral below middle of dorsal. Caudal peduncle as long as deep.  $2\frac{1}{2}$  scales between lateral line and ventral, 12 round caudal peduncle. Pinkish brown above, each scale blackish at the base, pinkish white beneath; fin dark grey.

Total length 320 mm.

A single specimen, from the gorge below the Victoria Falls.

#### Barbus codringtonii.

## D. III 9. A. III 5. L. lat. 32. L. tr. $\frac{4\frac{1}{2}}{4\frac{1}{2}}$ .

Depth of body  $3\frac{1}{4}$  times in total length, length of head 4 times. Shout rounded, 3 times in length of head, eye 6 times, interorbital width  $2\frac{1}{3}$  times; mouth inferior, its width 3 times in length of head; lips moderate, lower broadly interrupted on the chin; barbels 2 on each side, anterior  $\frac{1}{2}$ ,

posterior  $\frac{2}{3}$  diameter of eye. Last simple ray of dorsal not enlarged, flexible, smooth,  $1\frac{1}{2}$  length of head; border of dorsal concave. Anal reaching caudal. Base of ventral below middle of dorsal. Caudal peduncle slightly longer than deep. 2 scales between lateral line and ventral, 12 round caudal peduncle. Brown above, the scales blackish at the base, pink on the sides, white beneath; dorsal and ventrals yellow.

Total length 390 mm.

A single specimen from the Zambesi above the Victoria

#### Barbus fairbairnii.

## D. III 8. A. III 5. L. lat. 34. L. tr. $\frac{5\frac{1}{2}}{5\frac{1}{6}}$ .

Depth of body 3 times in total length, length of head 4 times. Snout obtusely pointed, covered with horny tubercles on tip and sides, 3 times in length of head, eye  $5\frac{1}{2}$  times, interorbital width  $2\frac{1}{2}$  times; mouth inferior, its width  $3\frac{1}{3}$  times in length of head; lips moderately thick, lower restricted to the sides; barbels 2 on each side, equal,  $\frac{1}{2}$  diameter of eye. Last simple ray of dorsal not enlarged, flexible, smooth, as long as head; border of dorsal straight. Anal reaching caudal. Base of ventral below middle of dorsal. Caudal peduncle  $1\frac{1}{4}$  times as long as deep.  $2\frac{1}{2}$  scales between lateral line and ventral, 12 round caudal peduncle. Purplish brown above, pinkish white beneath, the scales blackish at the base; fins purplish brown.

Total length 420 mm.

A single specimen, captured by Mr. Fairbairn in the gorge below Victoria Falls along with the *B. victoria* described above.

#### Barbus altidorsalis.

## D. III 9. A. III 5. L. lat. 28. L. tr. $\frac{4\frac{1}{3}}{4\frac{7}{3}}$ .

Depth of body 3 times in total length, length of head  $4\frac{1}{2}$  times. Snout rounded,  $3\frac{1}{2}$  times in length of head, eye 5 times, interorbital width  $2\frac{1}{2}$  times; mouth inferior, its width 3 times in length of head; lips thick, continuous across the chin; barbels 2 on each side, equal,  $\frac{1}{3}$  diameter of eye. Last simple ray of dorsal not enlarged, flexible, smooth, anterior branched rays also much elongate,  $1\frac{2}{3}$  length of head, the fin deeply notched behind the third branched ray. Anal reaching beyond base of caudal. Base of ventral below middle of dorsal. Caudal peduncle  $1\frac{1}{4}$  times as long as deep.

2 scales between lateral line and ventral, 12 round caudal peduncle. Brownish above, the scales darker at the base, pink on the sides, white beneath; fins yellow, blackish towards the edge.

Total length 360 mm.

A single specimen from the Kafue River, 250 miles from Victoria Falls.

#### Barbus chilotes.

## D. III 9–10. A. III 5. L. lat. 30–32. L. tr. $\frac{4\frac{1}{3}}{4\frac{1}{3}}$ .

Depth of body  $3\frac{1}{4}$  times in total length, length of head 4 or  $4\frac{1}{4}$  times. Shout rounded, about 3 times in length of head, eye  $3\frac{1}{2}$  to 5 times, interorbital width  $2\frac{1}{2}$  to  $2\frac{2}{3}$  times; mouth inferior, its width  $3\frac{1}{2}$  to 4 times in length of head; both lips much developed, each more or less produced into an obtusely pointed median lobe; barbels 2 on each side, posterior nearly twice as long as anterior and a little shorter than eye. Last simple ray of dorsal not enlarged, flexible, smooth,  $1\frac{1}{2}$  length of head; border of dorsal concave. Anal reaching or nearly reaching caudal. Base of ventral below middle of dorsal. Caudal peduncle  $1\frac{1}{3}$  times as long as deep. 2 or  $2\frac{1}{2}$  scales between lateral line and ventral, 12 round caudal peduncle. Pinkish brown above, the scales edged with blackish, white beneath; fins dark grey.

Two specimens, 145 and 235 mm. long, from the Maramba River, a tributary of the Zambesi two miles above

the Falls.

### Paratilapia kafuensis.

## D. XVI 15. A. III 12. Sq. 38 $\frac{7}{12}$ . L. lat. $\frac{20}{18}$ .

Depth of body  $2\frac{2}{3}$  times in total length, length of head  $2\frac{1}{5}$  times. Head strongly compressed, with concave upper profile; eye 5 times in length of head,  $1\frac{3}{4}$  times in length of snout; maxillary extending to below anterior fourth of eye; chin projecting; teeth very small, in 4 series; 8 series of scales on the check; 12 gill-rakers on lower part of anterior arch. Dorsal spines increasing in length to the last, which measures  $\frac{1}{3}$  length of head. Pectoral  $\frac{3}{2}$  length of head. Caudal fin rounded. Caudal pedancle a little longer than deep. Scales not denticulate. Pale brownish above, white below, dotted and marbled with dark brown; a dark oblique band from the eye to the maxillary; a black opercular spot; dorsal and anal with round blackish spots.

Total length 240 mm.

A single specimen from the Kafue River

#### Paratilapia codringtonii.

D. XV 14-15. A. III 10. Sq. 35-36  $\frac{4}{12}$ . L. lat.  $\frac{21-24}{14-16}$ .

Depth of body twice, or a little less than twice, in total length, length of head 3 to  $3\frac{1}{5}$  times. Eye 5 times in length of head,  $1\frac{2}{3}$  times in length of snout; maxillary not extending to below anterior border of eye; jaws equal in front; teeth in 3 series, outer rather large; 4 or 5 series of scales on the cheek; 11 or 12 gill-rakers on lower part of anterior arch. Dorsal spines increasing in length to the last, which measures a little more than  $\frac{1}{2}$  length of head; soft dorsal and anal acutely pointed. Pectoral a little shorter than head. Caudal peduncle much deeper than long. Scales not denticulate. Brownish, darker on the back, the scales lighter in the centre, a black opercular spot; dorsal purplish, edged with orange; ventrals purplish; anal and caudal orange.

Total length 300 mm.

Three specimens from the Zambesi above Victoria Falls.

# LXV.—A new Pogonomys presented to the British Museum by Sir William Ingram. By Oldfield Thomas.

In a collection of mammals obtained by Mr. W. Stalker while on the recent successful expedition sent out by Sir William Ingram in search of living paradise-birds there occur a number of specimens of the following new species of Pogonomys:—

#### Pogonomys vates, sp. n.

Near P. lamia, Thos., but colour redder and teeth smaller. Size medium. Fur soft and woolly, about 8 mm. in length on the back. General colour above greyish ochraceous buff or rufous, darkened on the back, clearer and more rufous on the sides. Under surface pure white, the hairs white to their bases. Muzzle rather lighter buffy. Whiskers very long and numerous, 6-7 cm. in length. Eyes with a narrow blackish rim. Ears naked, grey, fairly long, laid forward in a spirit-specimen they reach to the centre of the eye, narrowly oval, more or less pointed; in P. lepidus they are shorter, with more or less truncated ends. Outer sides of arms and legs like body, inner sides white; hands and feet almost naked, the sparse fine hairs white. Tail long, coarsely and roughly scaled, with a fair number of minute hairs on it,